



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/474,569 | 12/29/1999 | ROLAND LAMER | 70191/239 | 2393 |

7590 07/27/2007
JOSEPH D KUBORN
ANDRUS SCEALES STARKE & SAWALL
100 EAST WISCONSIN AVENUE SUITE 1100
MILKWAUKEE, WI 53202

| |
|----------|
| EXAMINER |
|----------|

TRAN, MYLINH T

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2179

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

428

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/474,569 | Applicant(s) LAMER, ROLAND | |
| | Examiner Mylinh Tran | Art Unit 2179 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-10,13,14,18-23,27-32 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-10, 13-14, 18-23, 27-32 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 05/10/07 has been entered.

Claims 1, 14, 23 and 32 have been amended. However, the limitation of the amended claims have not been found to be patentable over prior art of record, therefore, claims 1, 4-10, 13-14, 18-23, 27-32 and 35 are rejected under the new ground of rejection as set forth below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 14, 23 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term of "automatically generating a set of patient context data

from the retrieved patient image data" is unclear to the examiner. The examiner is not sure how "a set of patient context" is generated from "the patient image" data automatically. Does the applicant mean that it is generated without a user input?

The examiner is also unclear about a difference between patient image data, patient context data and patient textual data. The examiner would like to understand what they refer to and how they are related to each other.

Furthermore, based on the claim language, "a set of patient textual data" is generated by two ways. The first way is "a second application configured to retrieve a set of patient textual data from a RIS" and the second way is "the second application configured to retrieve and display the set of patient textual data in response to the retrieval of the patient image data and generation of the set of patient context data". It is very confused. The examiner could not locate fully descriptions for these terms in the present specification. The applicant is advised to point out where are these terms referred to in the specification in a next response.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-10, 13-14, 18-23, 27-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. [US. 6,260,021].

As per claims 1, 14, 23 and 32, Wong teaches a computer implemented method and corresponding system for integrating patient data comprising the steps/means:

a display unit (e.g. 38 of fig. 1); a first application configured to display patient images for a patient on the display unit (col. 7, lines 42-51) and generate a set of patient context data for the patient (col. 7, line 59 - col. 8, line 14), wherein the first application is configured to retrieve patient image data from a picture archival and communication system (PACS) (column 7, lines 28-58), and to automatically generate a set of patient context data for the patient from the retrieve patient image data (column 7, lines 38-57) further wherein the set of patient context data including patient and user information (column 3, lines 30-52, "Medical images and associated medical information, and indeed general patient data, can then be made uniformly available to user workstations" and "The system also includes a security object server, for authorizing user access to the image distribution system and to particular objects....");

a second application configured to retrieve a set of patient textual data from a radiology information system (RIS) (col. 7, line 59 - col. 8, line 14);

and a workstation coupled to the display unit and configured to operate both the first application and the second application that reside on the workstation (col.

8, lines 15-30), the first application configured to send the automatically generated the set of patient context data to the second application after the patient image data is retrieved and the second application configured to receive the set of patient context data and to retrieve and display the set of patient textual data on the display unit in response to the retrieval of the patient image data and generation of the set of patient context data (col. 7, line 59 - col. 8, line 14), wherein the first application is configured to retrieve patient image data for a picture archival and communication system (column 3, lines 30-41 "The middleware software of the present invention which processes data and requests to existing PAC and RI systems into a common format and structure. Medical images and associated medical information, and indeed general patient data, can then be made uniformly available to user workstations. A single workstation can access data from a diverse range of prior-art PAC and RI systems by running single client software....Further, existing PAC and RI systems can efficiently exchange data through the medium of this common format and structure."

Wong fail to clearly teach "the set of patient context data have to directly generate from PACS and directly send this context data to the RIS". However, Wong teaches the PAC system (26) and RI system (18) applications being in data communication with one another through a medical image server (12, figure 1). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine this teaching of directly generating

Art Unit: 2179

from PACS and directly sending this context data to the RIS with the Wong's teaching. The motivation of the combination would have been to provide a better interface for those who might need.

As per claim 4, Wong teaches the system is used to display medical images with different resolutions (col. 10, lines 25-27); Wong, however, does not suggest the display monitor having a resolution of at least 90 dpi. This feature is taught by Applicant's admitted prior art (pages 1-2 of the specification). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a display monitor having a resolution of at least 90 dpi in Wong's system since it would have displayed medical images with a higher quality.

As per claims 5, 20 and 29, Wong teaches the second application is selected from the group consisting of a case sign out application, a report entry application, an order detailing application, and an order viewer application (col. 11, lines 35-39).

As per claim 6, Wong further teaches comprising a second workstation coupled to the workstation, the second workstation configured to operate the second application (e.g. col. 7, lines 59-65).

As per claims 7 and 8, Wong teaches the second application is coupled to the first application via an object request broker and further comprising a bridge coupled between the second application and the object request broker, wherein the second application communicates via the component object model (COM) (col. 7, line 59 - col. 8, line 14 and col. 12, lines 59-62).

As per claims 9, 10, 21 and 30, Wong further teach. the first application generating the patient context data in response to user input at the input unit, wherein the input unit is selected from the group consisting of a mouse, a voice recognition system, a keystroke, a switch, and a light pen (col. 8, line 53 - col. 9, line 21).

As per claims 13, 22 and 31, Wong teaches the patient data includes patient examination information (col. 11, lines 36-41).

As per claims 18, 19, 27 and 28, Wong teaches the step of sending includes generating an event based on the patient context data and providing the event to the second application and further comprising converting the event from a first object model to a second object model and providing the converted event to the second application (col. 10, line 48 - col. 11, line 16).

As per claim 35, Wong further teaches a third application in data communication with the first application, the third application configured to receive the set of patient context data sent from the first application and to retrieve and display patient data for the patient based on the set of patient context data (col. 7, line 59 - col. 8, line 14 and col. 12, lines 59-62).

Response to Arguments

Applicant has argued that Wong does not teach automatically generating a set of patient context data with the first application nor sending this automatically generated context data to the second application.

The Examiner disagrees for the following reason:

Art Unit: 2179

Wong, as disclosed at figure 1, column 7, lines 28-67, teaches the communication between first application (PAC system) and the second application (RIS) through medial image server 12. Patient information is retrieved from PACS is sent to RIS. Applicant's attention is directed to column 7, lines 28-67 to include patient information being transferred between PACS, RIS and medical image server 12. Since the examiner is unclear how "a set of patient context" is generated from "the patient image" data automatically, the examiner assumes that the feature of "patient information being transferred between PACS (first application), RIS (second application) and medical image server 12" is similar to the features of "generating a set of patient context data with the first application and sending this generated context data to the second application".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4141.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo, can be reached at 571-272-4847.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:


571-273-8300

Art Unit: 2179

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mylinh Tran

Art Unit 2179



WEILUN LO
SUPERVISORY PATENT EXAMINER